OPP OFFICIAL RECORD HEALTH BYECTS CIVISION SCENIFIC DATA REVIEWS

CASWELL FILE PC 059102

JUL 30 1986

EPA SERES WI

MEMORANDUM

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

SUBJECT:

Chlorpyrifos-methyl TOX Chem. No. 179-AA

T0:

Jay Ellenberger

Insecticide Branch/HED (TS-769)

THRU:

Robert B. Jaeger, Section Head

Review Section #1

Toxicology Branch/HED (TS-769)

FROM:

Ray Landolt

Review Section #1

Toxicology Branch/HED (TS-769)

Registrant: Dow Chemical Co. letter of June 19, 1986.

Pesticide Petition: 6F3429/6H5506

Action Requested:

Reinstate the following tolerances on corn withdrawn by Dow Chemical Co. letter of April 11, 1985, proposed for Petition No. 0F2423/0H5277 on stored grain.

> Corn 6 ppm Corn, milling fraction (except flour) 30 ppm Corn, soapstock 40 ppm

Note:

This review has been expedited per the request of Jim Akerman, Acting Director, Registration Division, memo of July 11, 1986.

Recommendation:

The toxicity data base in support of tolerances for residues of 0.0-dimethyl 0-(3.5.6-trichloro-2-pyridinyl) phosphorothicate and its metabolite 3,5,6-trichloro-2-pyridinol in or on stored grain is complete. The acceptable daily intake (ADI) 0.01 mg/kg/day was determined from the two year dog feeding study NOEL of 0.1 mg/kg/day and a uncertainty factor of 10 based on cholinesterase depression at the 1.0 mg/kg/day level.

The tolerances proposed by the addition of corn will increase the TMRC from 0.019529 mg/kg/day to 0.023294 mg/kg/day; an increase of 19.28% (printout attached). The corn use would utilize 233% of the ADI as compared to 195% presently for residues on barley, oats, rice, sorghum and wheat.

The dietary contribution from these uses on stored grain has exceeded the ADI estimated from theoretical calculations of dietary exposure. "Toxicology Branch recommends that 'actual residues for chlorpyrifos-methyl be determined for all presently registered uses and that any additional tolerances be withheld pending the determination of such residues likely to result from any additional uses(s)." (Review of R. Landolt 8/20/85).

A survey of the Toxicology Branch file for chlorpyrifos methyl indicates that the Reldan 3% (EPA No. 7501-99) formulation has not been reviewed by Tox. Branch nor the acute studies in support of the precautionary labeling.

The inert ingredients (requested from RD 7/24/86) filed in the confidential statement of formula for Reldan 3% dust (EPA No. 7501-99) are cleared under 180.1001 when applied to growing crops or the raw agricultrual commodities after harvest.

Attachment

TS-769:LANDOLT:s11:X73710:7/29/86 Card New

TOXICOLOGY BRANCH ADI PRINTOUT Date: 07/22/86

THE FOLLOWING INFORMATION WAS SUPPLIED BY THE USER:

Chemical name: Chlorpyrifos-methyl adi = .01 MG/KG

Caswell #179AA

Safety factor = 10

CFR No. 419 ---

RESIDUE CONTRIBUTION OF PUBLISHED TOLERANGERA

CROP

TOLERANCE PETITION

(PPM) NUMBER

FOOD FACTOR

MG/DAY

No published tolerances listed in file.

RESIDUE CONTRIBUTION OF TOX-APPROVED TOLERANCES

	CROP	TOLERANCE (PPM)	PETITION NUMBER	FOOD FACTOR	MG/DAY
8	Barley	6.000	0F2423	0.03	0.002700000
26	Cattle	1.000	OF2423	7.18	0.107700000
54	Eggs	0.050	OF2423	2.77	0.002077500
62	Goats	1.000	OF2423	0.03	0.000450000
69	Hogs	0.500	0F2423	3.43	0.025725000
93	Milk and dairy products	0.020	0F2423	28.62	0.008586000
102	Oats	6.000	OF2423	0.36	0.032400000
128	Poultry	0.100	0F2423	2.94	0.004410000
137	Rice	6.000	0F2423	0.55	0.049500000
145	Sheep	1.000	0F2423	0.19	0.002850000
147	Sorghum .	6.000	0F2423	0.03	0.002700000
170	Wheat	6.000	OF2423	10.36	0.932400000
208	Horses	0.500	0F2423	0.03	0.000225000

0.019529 mg/kg/day (60kg BW, 1.5kg diet)

%adi 195.287250

					
RESIDUE C	ONTRIBUTION OF NEW	(PENDING)	TOLERANCES		
CROP	TOLERANCE (PPM)	PETITION NUMBER	FOOD FACTOR	MG/DAY	
38 Corn, all types	6.000	6F3429	2.51	0.225900000	
TMRC	(COlom DEL 1 Elem die	DET - 1 Slave Adams		%adi	

0.023294 mg/kg/day (60kg BW, 1.5kg diet)

232.937250



005359

Chemical:

Chlorpyrifos-methyl (ANSI)

PC Code:

059102

HED File Code

13000 Tox Reviews

Memo Date:

07/30/1986

File ID:

00000000

Accession Number:

412-01-0126

HED Records Reference Center 03/21/2001